

Date: Sun, 21 Mar 93 19:42:48 PST
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #358
To: Info-Hams

Info-Hams Digest Sun, 21 Mar 93 Volume 93 : Issue 358

Today's Topics:

 10 GHz Gunn diodes.
 [ANS] TESTS IN FAIRBANKS?????
 A question about interference
 Battery - Gel Cells - Problems (2 msgs)
 How long to get new Callsign?
 HRO query
 info-hams (2 msgs)
 N.A. 5.000MHz Time Signal - not WWV - what is it? (2 msgs)
 Nicad Memory Effect-Fact or Myth?
 Real NoCodes
 Wanted: list of DX nets

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Sun, 21 Mar 1993 21:59:23 GMT
From: usc!howland.reston.ans.net!bogus.sura.net!news-feed-1.peachnet.edu!emory!
sol.ctr.columbia.edu!news.columbia.edu!cunif.cc.columbia.edu!
mac20@network.UCSD.EDU
Subject: 10 GHz Gunn diodes.
To: info-hams@ucsd.edu

Hi, i just got back from the ham fest with a pair of Alpha 10 GHz gun diodes
and would really like to set up a high speed data link with them. the project
in the handbook for the 2 megabaud link sounds just great but the main
circuit board is rather formidable. plus the instructions aren't as
indepth as they might be.

I'm wondering if there are pc board patterns out there so i could etch my own perhaps or something else along these lines.

any information on constructing such a project would be highly welcome.

Thanks,
Mike
WB2ZLW/AA

```
*****
**** "Of course TV is a medium,          ****
***   It's not rare,                      ***
***   And it's certainly not well done." ***
```

Date: 21 Mar 93 22:27:52 GMT
From: news-mail-gateway@ucsd.edu
Subject: [ANS] TESTS IN FAIRBANKS?????
To: info-hams@ucsd.edu

>Is there a schedual for License testing for the Fairbanks, Alaska
>area???????

Suggest you contact Roger Hansen, KL7HFQ, in Anchorage. He's
the state wide VEC coordinator.

jd

Date: 21 Mar 93 19:18:31 EST
From: psinntp!arrl.org@uunet.uu.net
Subject: A question about interference
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, un027713@wvnmvms.wvnet.edu writes:

>I have a question on the topic of interference to home entertainment
>equipment and I'm hoping that the net.wisdom can come to my aid.

>I know that I must prevent harmonics from my rigs from causing interference
>to others. But, I found out that the carrier for CABLE channel 18 is in the
>2-meter band (it comes in on my HXT-202). I'm guessing that if I transmit
>on this frequency (I can't test this yet, I'm still waiting for my ticket) I
>may cause interference to my TV on that channel.

>My question is...who is legally responsible for cleaning up the interference?
>I know that as a responsible ham, I should work with my neighbors to help clear
>clear up any problems even if it's not my responsibility. But since I would be
>operating within the 2-meter band, would the cable co. be responsible for
>preventing my signal from entering their system?

Congratulations on getting your license!

In cases of interference to CATV channel 18 (sometimes also called channel E) you are dealing with some form of leakage of your fundamental signal into the system. The bottom line is that this is not your direct responsibility, although I always encourage hams to work with their neighbors to *help* *locate* solutions to an interference problem that involves the ham. It is as much of a public service as sending a radio message to your neighbor's Aunt Tilly.

The cable company may or may not be responsible. They do have regulations that deal with the quality of picture that they must provide, and if a foreign signal is leaking in, the requirements of those regulations will not be met. However, they can only control their cable system. The interference can be caused by a leak in the cable system or its equipment, or it can be caused by a leak in a customer's cable-ready TV. The cable company is not responsible for equipment that is not their own.

The ARRL has several information packages available to help with interference problems. For the electronic versions, send the following as mail to info@arrl.org :

help
index
send EMI-GEN
send EMI-CATVI
send EMI-RF-LAMPS
send EMI-SOURCE
send EMI-TELEPHONE
quit

These packages are also available as paper files from the ARRL Technical Department Secretary. If you want them all, send a 9X12 SASE with 6 units of postage to ARRL HQ and we will send them along.

If you have any questions about how to solve an EMI problem that are not answered by the packages or our RFI book, give me a call here at HQ -- I will do what I can to help.

To: info-hams@ucsd.edu

In article <joeC497Cz.6L3@netcom.com> joe@netcom.com (Joseph Jesson) writes:

> Anyone kown any tricks to raise the lead acid batts from the dead???
> I often zap Nicads with a short burst of current to vaporize the
> dendrite shorts but, don't know of any lead acid gel tricks...

Several years ago I purchased (at an absurdly low price) several battery packs consisting of Gates D-size 2.5 a-h lead acid cells. They are often referred to as gel cells, but Gates says they are really a solid electrolyte type. The cells exhibited high impedance and refused to take a charge, so I called Gates for advice. They said to charge one cell at a time from a 20 volt source, with a 75 ohm, 5 watt resistor in series. It works like a charm, rejuvenating 95% of the cells in 24 hours. The chances of recovery go down sharply if you cannot get to individual cells. Using a higher voltage is hazardous for the cells and for you. The procedure should work for most any gel cells. Adjust the resistor value to allow a maximum charge current of 1/10 the amp-hour rating, and heat-sink the resistor if necessary. The voltage across the cell will drop to about 2.3 volts when the cell has been rejuvenated, which may occasionally take longer than 24 hours. Lead-acid cells love to be fully charged, so keep recovered cells under trickle charge to avoid necessitating a repeat treatment.

--Ken Carver

Date: Sun, 21 Mar 93 04:21:31 GMT

From: pacbell.com!att-out!walter!porthos!dancer!whs70@network.UCSD.EDU

Subject: How long to get new Callsign?

To: info-hams@ucsd.edu

In article <1993Mar18.144802.29529@newshost.lanl.gov> tjf@beta.lanl.gov (Tom J Farish) writes:

>Hi...I upgraded to Advanced this week and requested a new callsign. Will
>it take 9 weeks for it to arrived, or are such things processed more
>quickly than a new license?

>-Tom

>KB6YEM/AA

I upgraded to general from Tech in December (19th) and did NOT request a new call and the upgrade still took 9 weeks.

Standard Disclaimer- Any opinions, etc. are mine and NOT my employer's.

Bill Sohl (K2UNK) BELLCORE (Bell Communications Research, Inc.)

Morristown, NJ

email via UUCP

bcr!cc!whs70

201-829-2879 Weekdays email via Internet whs70@cc.bellcore.com

Date: Sun, 21 Mar 1993 23:06:58 GMT
From: swrinde!gatech!usenet.ins.cwru.edu!neoucom.edu!wtm@network.UCSD.EDU
Subject: HRO query
To: info-hams@ucsd.edu

X = fat pin
x = thin pin

Viewed from the pin side of the plug:

B+ x x B-

A+ X X A- (ground)

The A voltage is 6.3 volts (can be AC)

The B voltage is normally 240 VDC, but can go as low as 165 VDC and still provide in-spec operation. At 6.3 volts, the heater current is about 3.4 amps. The plate draw is about 70 mA (for an HRO-1, which is the one I've got).

Darn nice receiver. The plug-ins and 0-500 dial are, shall we say charming?, by modern standards. The dial repeatability is amazing, so once I know where my favorite frequencies are, I can retune them any time. I still use my HRO-5TA 1 all the time. I'm still looking for an original PSU for a reasonable price from somebody that doesn't think it is a priceless antique. I'm using an old Tektronix instrument rack PSU for now. Would be nice to have a product detector instead of just BFO, but that would detract from the charm I suppose.

--

Bill Mayhew NEOUCOM Computer Services Department
Rootstown, OH 44272-9995 USA phone: 216-325-2511
wtm@uhura.neoucom.edu (140.220.1.1) 146.580: N8WED

Date: 22 Mar 93 00:27:07 GMT
From: news-mail-gateway@ucsd.edu
Subject: info-hams
To: info-hams@ucsd.edu

unsubscribe info-hams

Date: 22 Mar 93 00:27:31 GMT
From: news-mail-gateway@ucsd.edu
Subject: info-hams
To: info-hams@ucsd.edu

unsubscribe info-hams

Date: Sun, 21 Mar 1993 19:22:57 GMT
From: netcomsv!bongo!hatch!pro-janin!jestevez@decwrl.dec.com
Subject: N.A. 5.000MHz Time Signal - not WWV - what is it?
To: info-hams@ucsd.edu

The signals that you heard was coming from Venezuela. I also copy the time and frequency signals.

A directional antenna will help you eliminate the interfering station; or it could help you locate the direction in which the radio signal is coming from.

Every once in a while, we get the propagation changes in favor of some particular area of the world. If you would like to learn more about propagation, look for any book at your local book store on "Radio Propagation". Some libraries might have them, too.

If you listening carefully, on the same frequency... you might also copy another station coming from Japan, etc.

Joe Estevez

Date: 22 Mar 93 01:27:38 GMT
From: munnari.oz.au!metro!mippet.ci.com.au!eram!dave@network.UCSD.EDU
Subject: N.A. 5.000MHz Time Signal - not WWV - what is it?
To: info-hams@ucsd.edu

In article <1993Mar18.133126.16038@bnr.ca>,
mwandel@bnr.ca (Markus Wandel) writes:

| Yesterday I tuned to the 5.000MHz WWV signal for a propagation check
| when I heard something odd. There is another time signal on that
| frequency. It features a male voice announcement, in three pieces,
| in the 10-second space before the full minute. The second markers
| are 1KHz tones of maybe 0.1 second duration. The language is not one
| I understand, definitely not English. Where does this signal come

Well, it's not often we Australians are accused of not speaking English
by Americans :-), but it looks to me like you came across VNG, the
Australian station located near Sydney. The announcer's voice (if it
is VNG) would be Graham Connolly VK2BL, who as an ex-ABC radio announcer
definitely DOES speak English! By the way, the 5 MHz frequency is on
AM; were you perchance on SSB at the time?

Other VNG frequencies to watch out for are 8.638 and 12.984 (DSB), and
16 MHz (AM). Another one on 2.5 was recently added.

--

Dave Horsfall (VK2KFU) VK2KFU @ VK2RWI.NSW.AUS.OC PGP 2.1
dave@esi.COM.AU ...muninari!esi.COM.AU!dave available

Date: Sun, 21 Mar 1993 15:51:08 GMT
From: usc!howland.reston.ans.net!europa.eng.gtefsd.com!emory!wa4mei!ke4zv!
gary@network.UCSD.EDU
Subject: Nicad Memory Effect-Fact or Myth?
To: info-hams@ucsd.edu

In article <1993Mar21.023002.5207@ssc.com> tad@ssc.com (Tad Cook) writes:

>

>Do the performance of NiCad batteries suffer when they are repeatedly
>only slightly discharged? The story goes that one should do a deep
>discharge every time, before doing a complete charge. Otherwise
>after a number of shallow charge-discharge cycles the battery cannot
>do a deep discharge anymore.

>

>Some years ago I read a letter in the Technical Correspondence column
>in QST from a couple of engineers at Gould saying that this was a myth,
>and that the nicad memory effect could only be demonstrated in the
>lab when the battery is repeatedly discharged many times to precisely
>the same level.

>

>Last year QST magazine ran an article on nicads that mentioned the
>memory effect, and said that it was a myth, or at least vastly
>overstated.

The correct term is "voltage depression". It will occur only under

certain special conditions. The more important consideration is how much *overcharge* you put on your batteries, and at what rate and for how long. All batteries, NiCad or otherwise, require an overcharge to reach full charge. Depending on battery construction and battery chemistry, not all NiCads are created equal, different amounts and rates of overcharge are required for optimum battery life. Certain batteries designed for standby use can tolerate a persistent moderate overcharge. Most HT and personal electronics battery packs cannot.

If you routinely subject your HT battery to a full 14 hour charge at the 10 hour rate when it only *requires* 2 hours of charge, then you'll have a ruined battery in short order. Subjecting the typical NiCad battery to a persistent charge at greater than the 100 hour rate is asking for trouble. *Some* rapid chargers can sense onset of full charge and switch off, but most don't. A rapid excessive overcharge is almost certain to quickly ruin a battery.

Now on the other hand, you run the risk of *reversing* a cell if you overly discharge a pack, so the dischargers you see on the market are dangerous tools that must be used with extreme care. If you suspect that a battery is suffering from voltage depression, you should *disassemble the pack* and discharge each cell *individually*. You can't hurt the cells this way, even if you take them to zero voltage. It's also true that NiCad batteries will last for about 500 complete charge/discharge cycles while they will last for a thousand or more partial charge/discharge cycles. But *only* if the rules about proper overcharge procedures are followed. This can be a real pain to do in practice.

What do I do? I use a pack until the HT complains of a low battery, then I swap on a fresh pack and recharge the other in a proper voltage droop sensing charger. This type of charger is more reliable than the temperature sensing chargers. Regardless of charge state, terminal voltage will droop when the cell reaches full charge. With the thermal sensing chargers, you're already into excessive overcharge before temperature rise shuts the charger down. With timed chargers, you're likely to cook the battery, especially if a momentary power line glitch resets the timer.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: 21 Mar 93 19:41:38 EST
From: psinntp!arrl.org@uunet.uu.net
Subject: Real NoCodes
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, ka1ftw@anomaly.sbs.com writes:

>Long list of insults deleted.

As a dyed in the wool long-time ham and CW operator, I just want to state that you do not represent my views in the least. I don't know what the purpose of your post actually is, but that type of intolerance is harmful to a hobby that I love.

I am sure that every one of sins that you listed have been done by more than one or two of the newly licensed hams, but as I think back to my early days, I remember all of the operating and procedural conventions that were significantly different on the Novice bands than they were on the rest of the General-and-up bands. As we hear the newcomers doing things a little bit differently than we do, let's not forget our our humble beginnings.

If you really want to correct procedural operating errors, do so with honest friendship and with dignity and grace. Most new hams will learn pretty quickly by example, so try to set a good one.

>Anyone else have any horror stoties out there ????

Yes, the intolerance and downright unfriendliness of some hams toward the newly licensed hams that are approaching us in hopeful anticipation of all of the fun of ham radio that means so much to us. This intolerance and sometimes downright rudeness causes a lot more damage than someone who says "QRZ the frequency."

As a ham who loves CW, I want to say "Welcome to the hobby" to all those who have chosen to operate ham radio differently than I do. Your FCC license makes you as much of a ham as all who have gone before you, and I know that many of you have and will make positive contributions to the Amateur Radio service!

73 from ARRL HQ, Ed

Ed Hare, KA1CV
American Radio Relay League

ehare@arrl.org

225 Main St.
Newington, CT 06111
(203) 666-1541 - voice
ARRL Laboratory Supervisor
RFI, xmtr and rcvr testing

You will never put the puzzle together
if you keep putting all the pieces
back in the box.

Date: 21 Mar 1993 19:57:13 -0600
From: swrinde!cs.utexas.edu!tamsun.tamu.edu!tamsun.tamu.edu!news@network.UCSD.EDU
Subject: Wanted: list of DX nets
To: info-hams@ucsd.edu

Hi,

Could someone please provide me with a list of DX nets. I purchased the ARRL net directory in order to find this info and found only one in the whole thing. Also, what are some of the more common newsletters, magazines, etc., which concern themselves with DX matters or info.

Thanks a lot and 73,

Brandon KB5WDR/AE

Date: 21 Mar 93 11:50:50 CST
From: sdd.hp.com!zaphod.mps.ohio-state.edu!menudo.uh.edu!ccsvax.sfasu.edu!
f_speerjr@network.UCSD.EDU
To: info-hams@ucsd.edu

References <1993Mar15.161155.399@bnr.ca>,
<1993Mar16.015844.25131@odin.corp.sgi.com>,
<1993Mar16.182158.27701@ryn.mro4.dec.com>
Subject : Re: A few QRP related questions.

In article <1993Mar16.182158.27701@ryn.mro4.dec.com>, taber@cimfie.enet.dec.com (PStJTT) writes:

>

>>

>>but he did bring up an interesting question. is the ARRL allowing
>>Field Day on the WARC bands? i thought we had an agreement to stay
>>off them critters for ALL major contests. am i ignorant and/or
>>misinformed?

>>

>

> I won't touch the question, but Field Day is not a contest. It's an

> emergency communications drill. So it's just as important to get
> experience setting up for the WARC bands as for any other. Field Day
> also operates the satellites, which are likewise contest-free. Viewed as
> emergency practice, you can see why all bands/modes are used.

>

>>>>==>PStJTT

In KR7L's 1992 book, *Your QRP Operating Companion*, published by ARRL, Field Day is shown as being conducted on ALL bands EXCEPT 30 meters.

James R. Speer	Phone: 409 568 1478
Department of Psychology	Fax: 409 568 2190
Stephen F. Austin State University	E-mail: F_SPEERJR@ccsvax.sfasu.edu
Nacogdoches TX 75962-3046	Ham Radio: K5YUT

Date: Fri, 19 Mar 93 19:56:30 GMT

From: pacbell.com!att-out!walter!porthos!dancer!whs70@network.UCSD.EDU

To: info-hams@ucsd.edu

References <randall.732247996@seashore>, <14570697@hpnmdla.sr.hp.com>,
<randall.732409205@seashore>

Subject : Re: Foothill hamfest disappointing

In article <randall.732409205@seashore> randall@informix.com (Randall Rhea) writes:

>Some of the sellers' don't appear to be interested in much
>of anything except selling at hamfests. I don't mind
>that some of the pros are there, but it would be nice
>to see little guys too.

>

>> The few times my XYL attended

>> she really got a kick out of the lady selling jewelry made out of IC's!

>> The main reason "joe" doesn't sell out there any more is (1) its too

>> expensive, and

But if "Joe" got together with Fred and Barney it would only cost them
1/3 of the table price (or tailgate spot price)

(2) he doesn't want to get up at 4 AM to guarantee he'll

>> get a spot. I was one of those that would go to rid myself of excess

>> ham stuff, but for the reasons outlined above I only do so once a year

>> sometime in the middle of the season.

Again, if 2 or more hams "partnered" only one would need to be the
early riser at any individual hamfest.

>I want to reiterate that I had a good time at the Foothill swap, and
>I appreciate those who put on the event.
>
>However, if the sellers are primarily professionals, then the
>whole point of having a hamfest is diminished in my opinion.
>Parts can be obtained at one of many retail outlets, especially
>here in the Bay Area. Rigs are plentiful and available at
>retail stores or mail-order. You can also park at retail stores.
>I like going to the Foothill flea and being around other hams, but it is
>so much of a hassle that I doubt I will be going there
>much more. I would imagine that many other hams feel the same
>way.

One thing happening at the momment (IMHO) is that the availability
of used equipment isn't as high as several years ago because of the
significant influx of new hams because of the no-code license.
I note too that the influx of no-code techs first hit the VHF (Mobile
and HT) used market and now, with many of those no-code folks upgrading
the impact (lack of used equipment) is also on the HF stuff. Two weeks
ago at the NJ Spilt Rock Hamfest, I was there early and there wasn't
a single contemporary used HF rig for sale....not one TS-440,
or ICOM unit, etc. Likewise there was almost no used VHF stuff
either.

Just an observation.

Standard Disclaimer- Any opinions, etc. are mine and NOT my employer's.

Bill Sohl (K2UNK) BELLCORE (Bell Communications Research, Inc.)
Morristown, NJ email via UUCP bcr!cc!whs70
201-829-2879 Weekdays email via Internet whs70@cc.bellcore.com

End of Info-Hams Digest V93 #358
